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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,871	03/01/2002	Mark John DeBlock	GECA 3196	5924

7590

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EXAMINER

AURORA, REENA

ART UNIT

PAPER NUMBER

2862

DATE MAILED: 05/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/087,871

Applicant(s)

DEBLOCK ET AL

Examiner

Reena Aurora

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) 9 - 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Applicant's election with traverse of Group I in Paper No. 4 is acknowledged.

The traversal is on the ground(s) that Groups I – III are related. This is not found persuasive because the complete search required for one group is different from the complete search required for other groups.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 9 – 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 3.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 – 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. As to claim 1, it is unclear how the electrical runout is being separated from the mechanical runout. There is no step in the body of the claim that clearly shows how electrical runout is being separated from mechanical runout.

6. The claims not specifically addressed share the indefiniteness as they depend from rejected base claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 3 - 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Biggs (3,986,380).

9. As to claims 1 and 4, Biggs discloses a method for removing electrical runout in a machine shaft comprising: positioning at least one position probe (49) such that the position probe measures a position of a rotating part; positioning at least one proximity (42) probe adjacent the rotating part; and calculating an electrical runout based on measurements obtained from the position probe and the proximity probe (Note Fig. 2 and Column 3, Line 40 – Column 4, Line 2).

10. As to claim 3, Biggs discloses a method for removing electrical runout in a machine shaft as explained above. Biggs further discloses the positioning of at least one proximity probe adjacent at least one position probe (Fig. 2, 41 and 49).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 2, 5 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biggs (3,986,380) in view of Rozelle et al. (5,033,305).

13. As to claims 2 and 5, Biggs discloses a method for removing electrical runout in a machine shaft as explained above. Biggs fails to disclose two position probe 180° circumferentially separated from each other. Rozelle et al. (hereinafter referred to as Rozelle) discloses a method of monitoring the movement of a rotating part of a machine having a plurality of circumferentially spaced sensors disposed opposite a rotating component to provide information regarding the torsional vibration behavior of the rotor structure. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the device of Biggs in view of Rozelle to provide for a plurality of circumferentially spaced sensors so as to be able to accurately determine the speed of the rotation of the rotor structure.

14. As to claims 6 and 7, Biggs discloses a method for removing electrical runout in a machine shaft as explained above. Biggs fails to disclose at least four position probes against a rotating part. Rozelle discloses a method of monitoring the movement of a rotating part as explained above. Rozelle further discloses a plurality of circumferentially spaced sensors disposed opposite a rotating component to provide information regarding the torsional vibration behavior of the rotor structure (Fig. 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the device of Biggs in view of Rozelle to provide for at least four position probes so as to be able to accurately determine the speed of the rotation of the

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rotor structure and also mere duplication of parts has no patentable significance since the device will not produce unexpected results (Note MPEP 2144.04; VI; B).

15. As to claim 8, Biggs discloses a method for removing electrical runout in a machine shaft as explained above. Rozelle discloses a method of monitoring the movement of a rotating part as explained above. Biggs and Rozelle fail to disclose calculation of electrical runout based on measurements obtained from the position probe and the proximity probe and the proximity probe utilizing a linear variable differential transformer data collection system. However, it is well known in the magnetic field art to use a linear variable differential transformers for measuring reference and target surface movement. Therefore, it would have been obvious for one skilled in the art, at the time of invention to have included a linear variable differential transformer in the device of Biggs and Rozelle for data collection system since linear variable differential transformer is a sensitive instrument for measuring position changes (See MPEP 2144.03).

Prior Art of Record

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


17. Miller et al. (5,140,534) is cited for its disclosure of a centerless runout and profile inspection system and method.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 703-605-1372. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on 703-308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3432 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


Reena Aurora
May 9, 2003


N. Le
Supervisory Patent Examiner
Technology Center 2800